Power System Protection Testing with the OMICRON Test Universe

3 days | **English** | **# Cprs15en**

Learn how to efficiently test overcurrent, distance and transformer differential relays with the OMICRON Test Universe. Get familiar with the test procedure in hands-on and theoretical sessions. Work with special test set-ups that simulate the substation in the classroom.

Objectives

- Performing commissioning, trouble-shooting and periodic tests of protection relays
- Testing overcurrent, distance and transformer differential relays with the OMICRON Test Universe
- Creating and modifying automated test plans and customized test reports
- Using the OMICRON Test Universe from scratch

Content

- Quick current and voltage output for easy wiring tests
- Configuration of the test object parameters and the test hardware
- Creating test plans which adapt automatically to newly entered relay settings
- Creating a flexible test plan for overcurrent relays including testing pick-up values and trip times
- Hands-on testing of the overcurrent protection function
- Creating a flexible test plan for distance relays including testing the trip times and zone reaches as well as switch on to fault (manual close) and auto-reclosing
- Hands-on testing of distance relays
- Creating a flexible test plan for transformer differential relays including testing the stability during external faults, the tripping characteristic, the trip times and the harmonic restraints
- Hands-on testing of transformer differential relays

Solutions

Control Center, QuickCMC, Ramping, Pulse Ramping, Overcurrent, Advanced Distance, State Sequencer, Autoreclosure, Advanced Differential
CMC-Family

Audience

Technical staff from utilities, transmission and distribution networks, railway grids, service companies and manufacturers involved in protection testing

Prerequisites

Basic knowledge of power system protection, or ideally attendance of the course Cprs51en